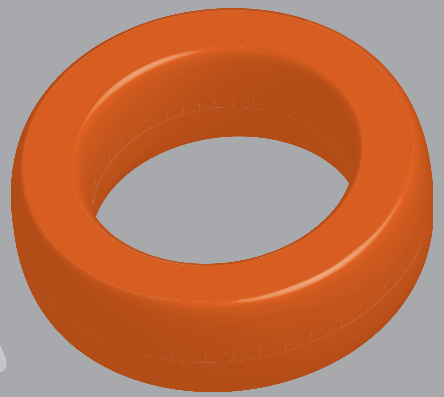
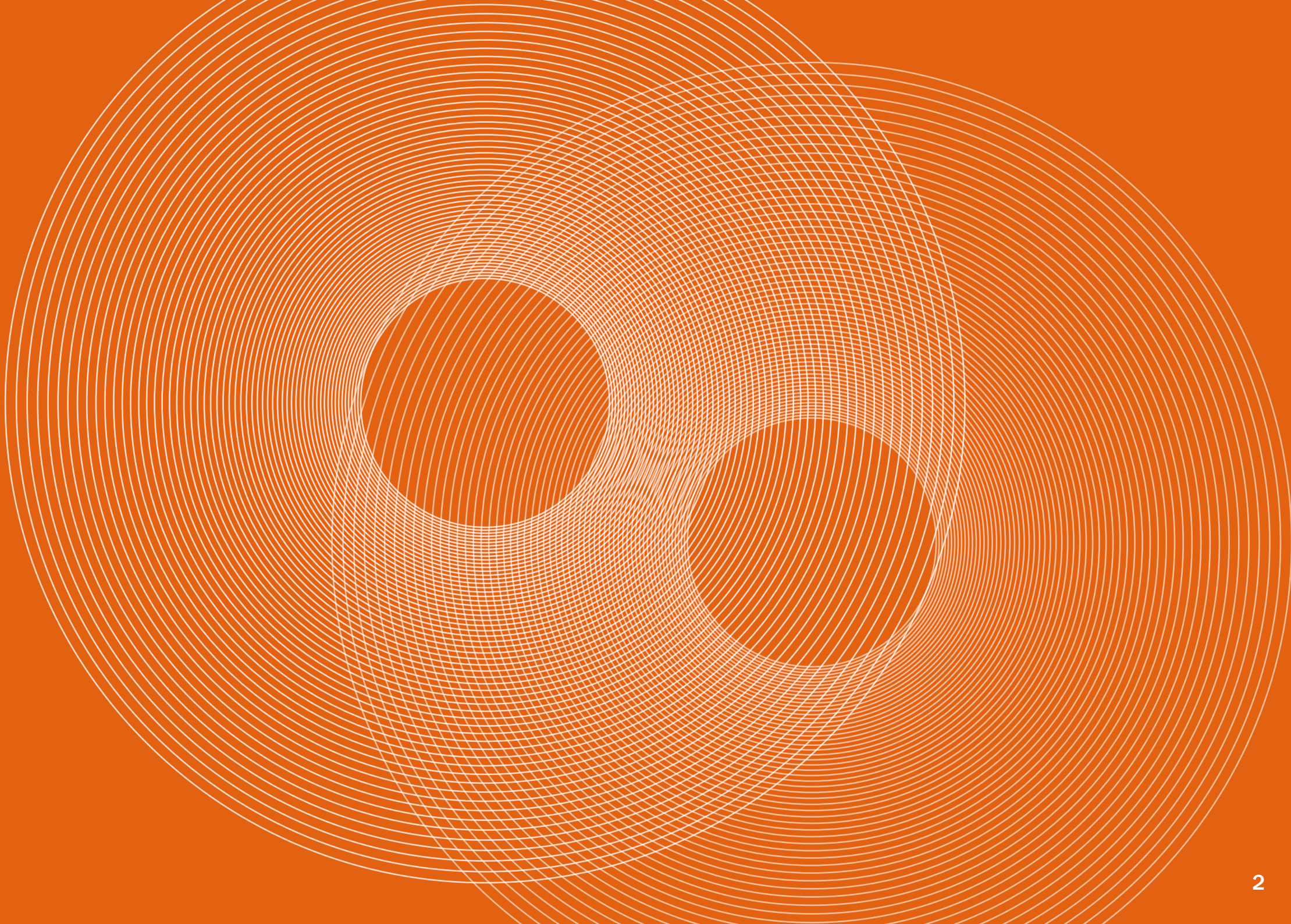
halo





the brief

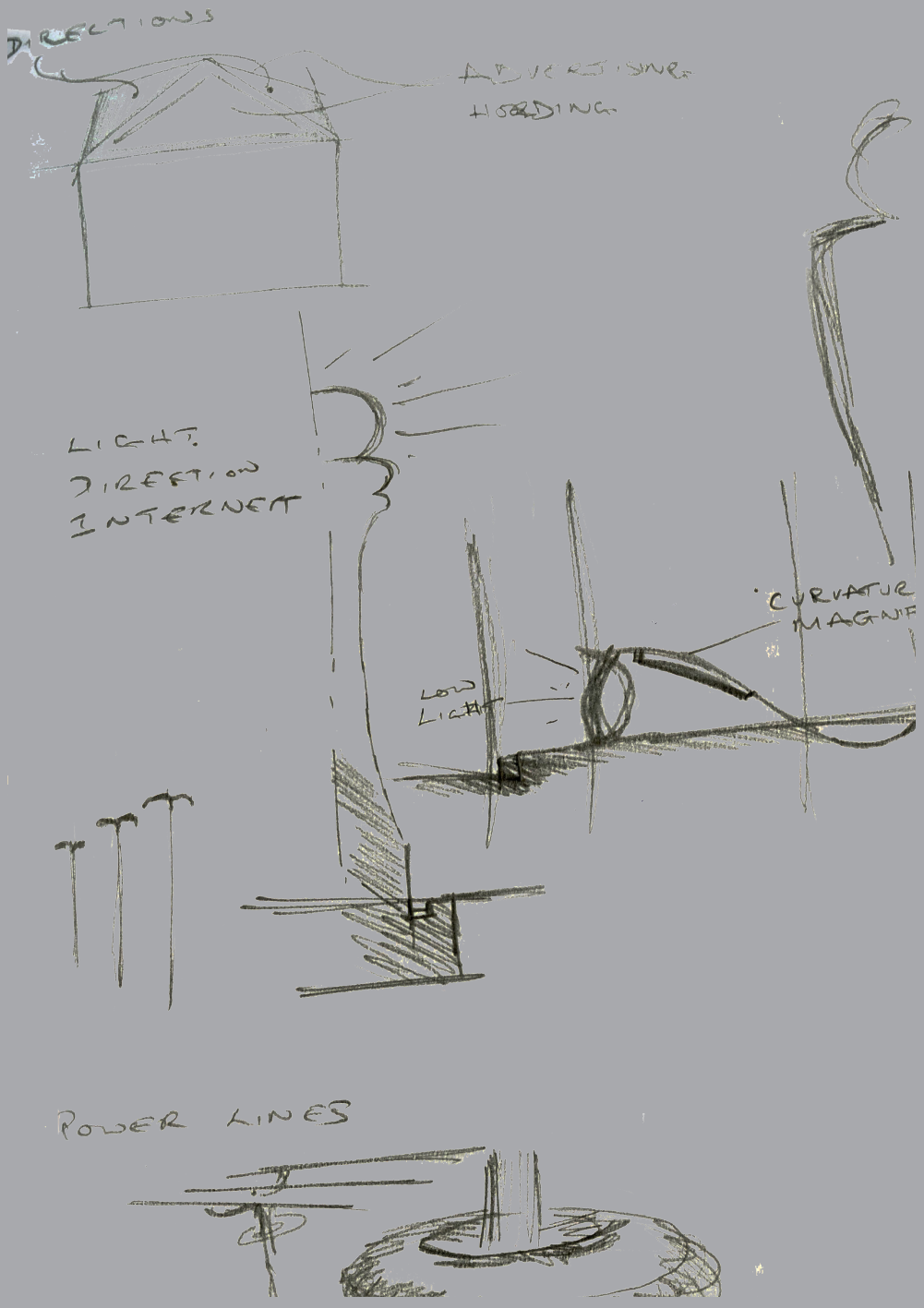
Technology is continuing to develop and speed and communications are becoming increasingly important. Twitter, Facebook, blogs and internet are all spreading and people are constantly seeking ways to stay in touch. Businesses rely on continual contact for maximum productivity and at the moment are limited to local wifi locations, offices and at home. The product looks at changing this perception and seeks to *bring communications to the masses across the country*.

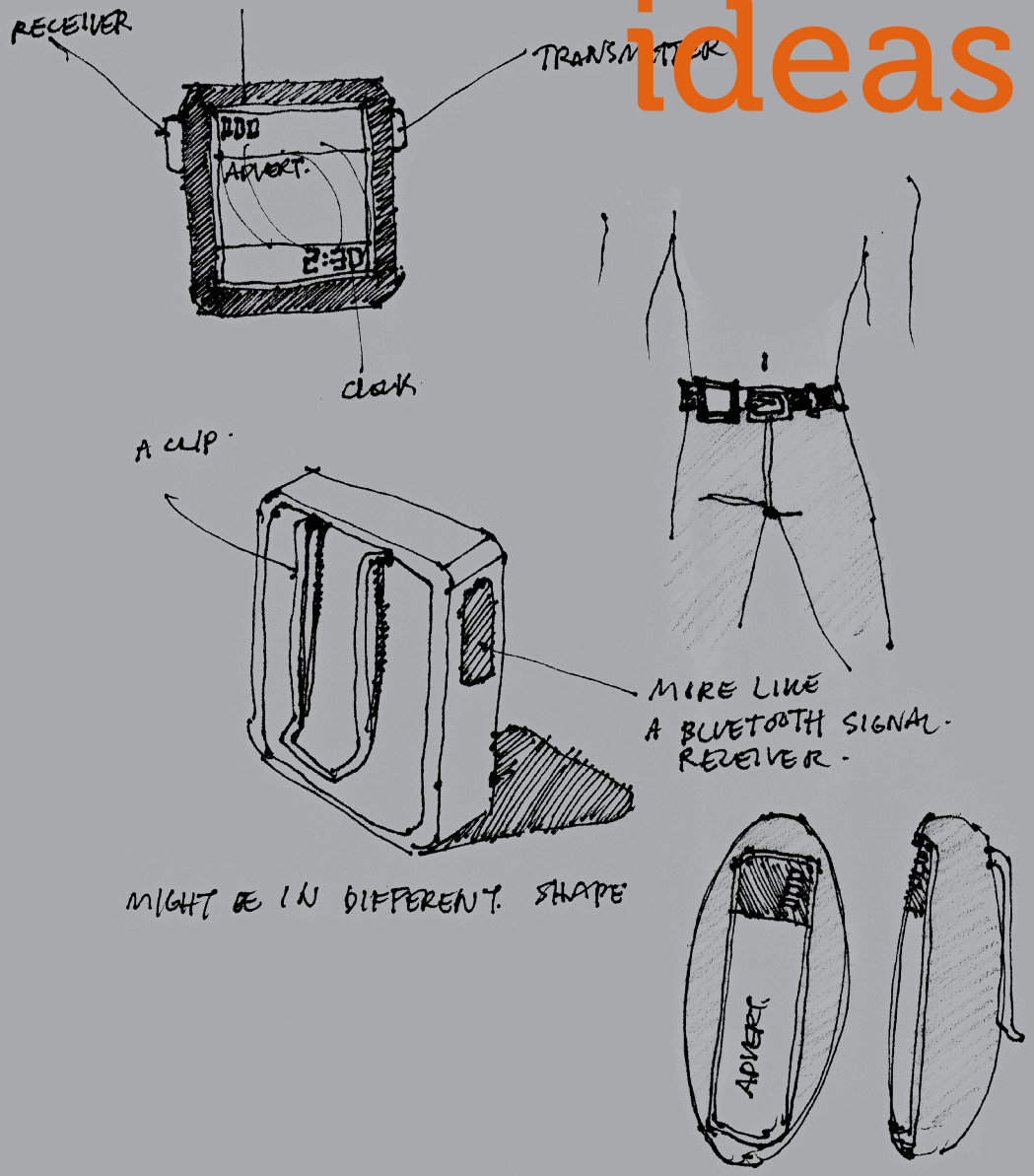
The product will allow users to access the internet free of charge across the country, as they are driven, are on the train or in the park. As they move down the street they will no longer have to rely on coffee shops but will be able to receive the necessary information to connect online. Through simple elegant design, integrated into the built environment, the product will be easy to install and unobtrusive to the existing urban context.

The internet and wifi technology is developing and is in place to open up the unrealised potential of this product. Present thoughts are into integration with aircraft but little has been considered with regards to personal travel along roads, rail and by foot. By 2015 this technology will be expected to at the levels that would support this application.
Through integration of plasma display screens will enable the product to be self supporting financially.

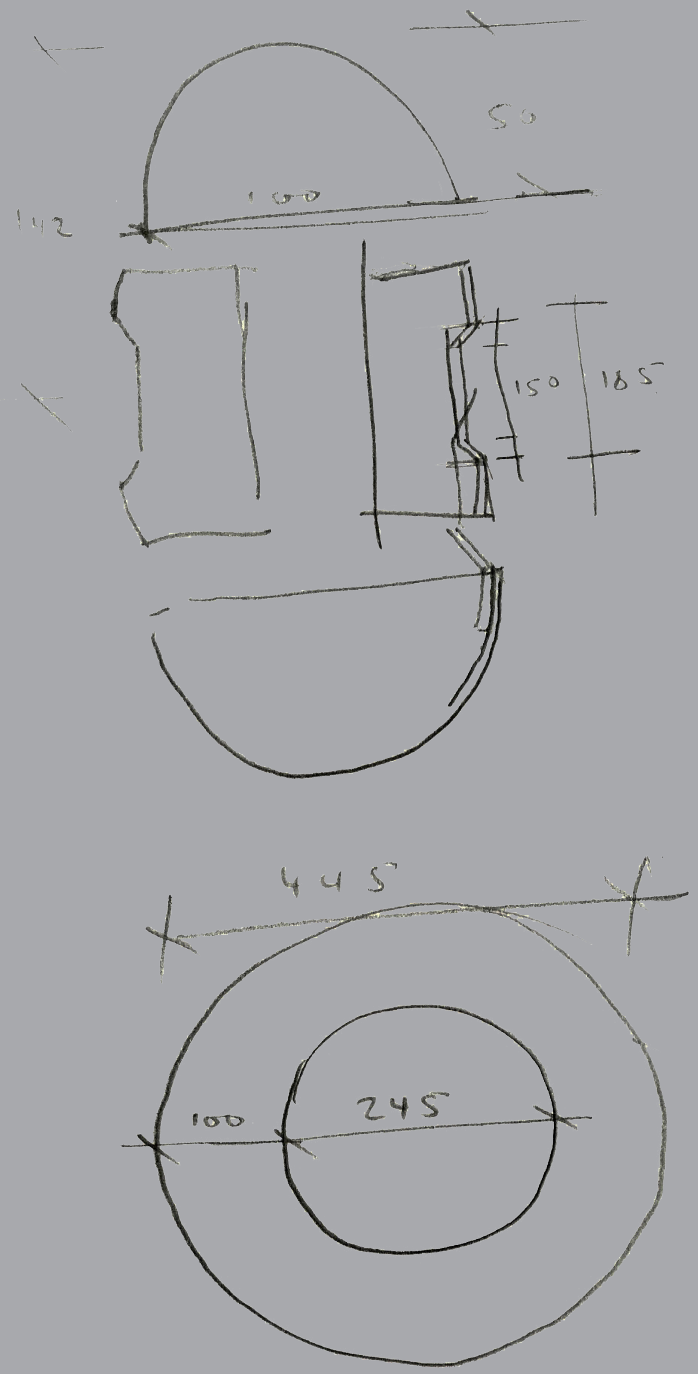
The prominence of these objects and the individual nature of these products will offer a unique advertising opportunity that should supply sufficient funds to pay for this product and running costs.

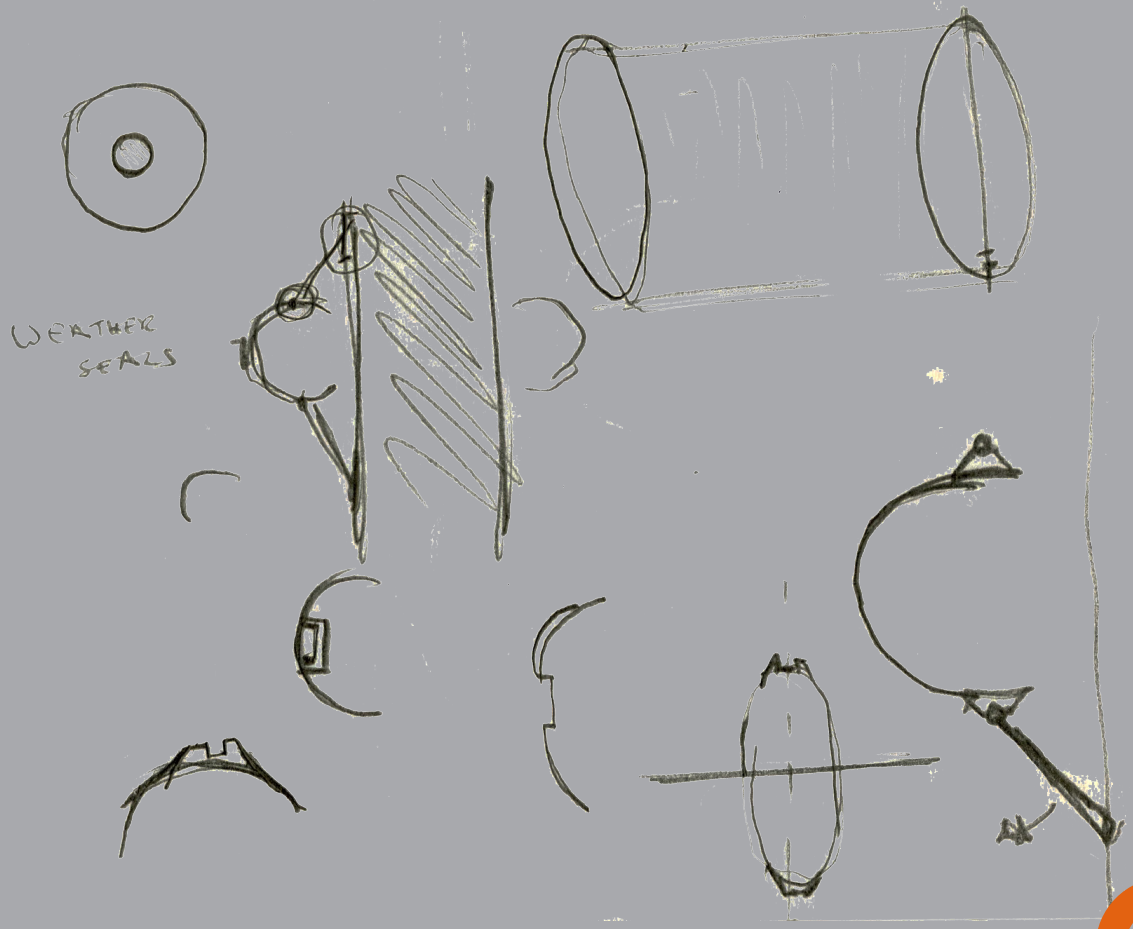
initial ideas

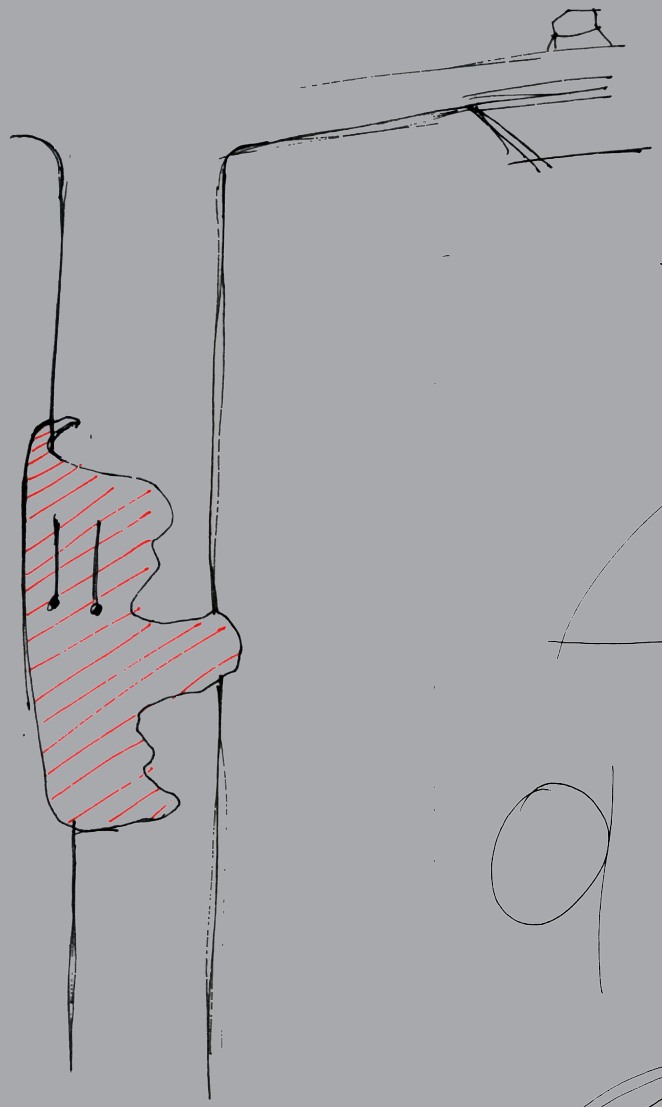


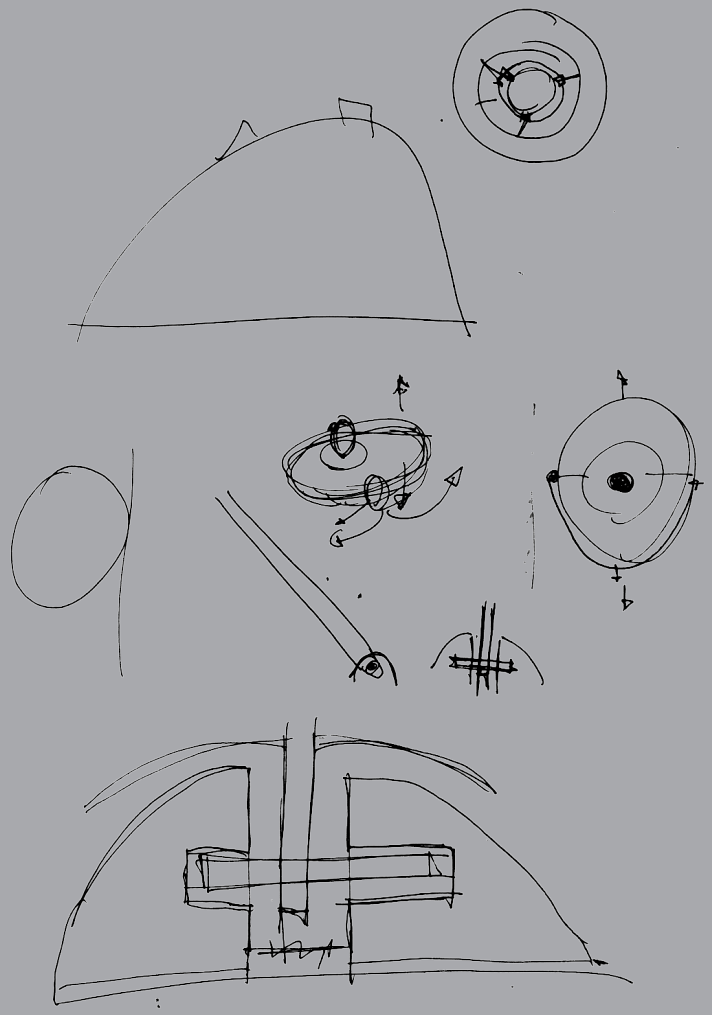


development of ideas

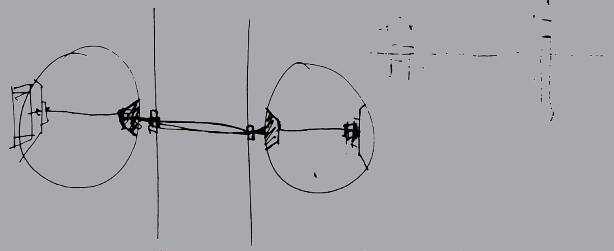




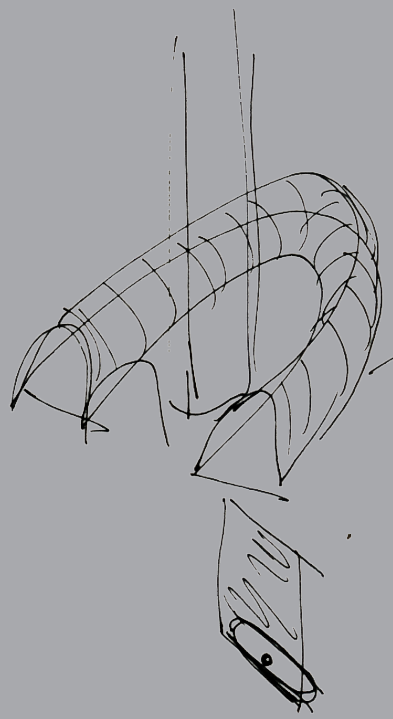


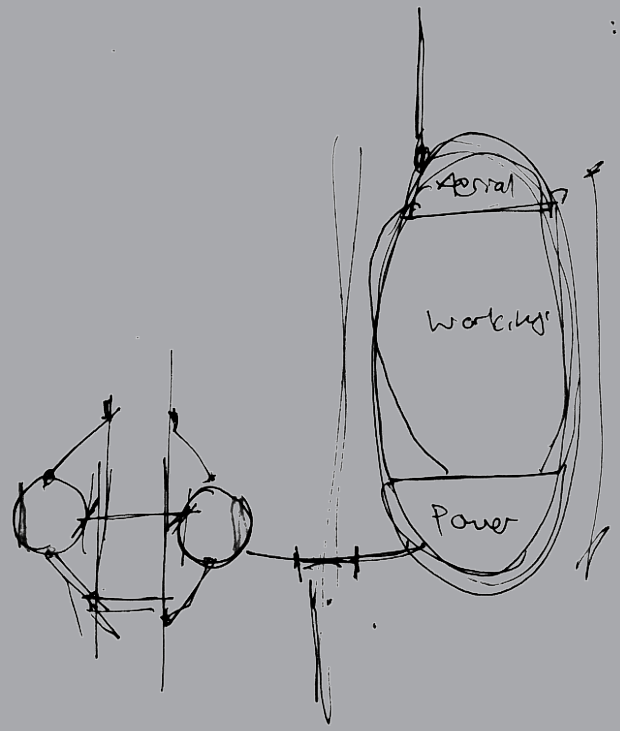


RESEARCH INTO LAMP POSTS

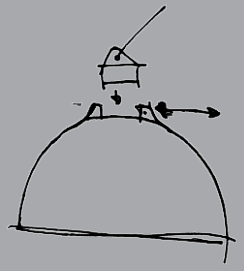


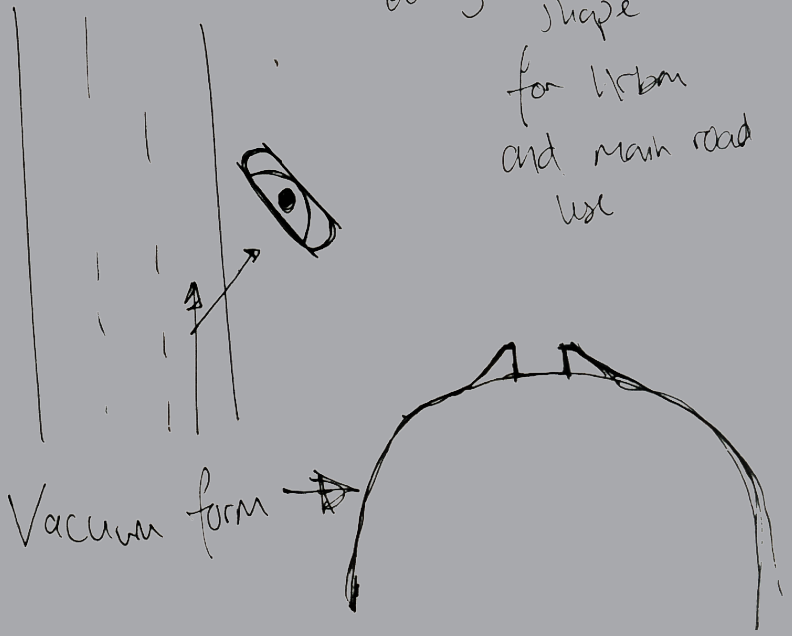
- WHY NOT AT THE MOMENT?
- LOOK AT HOW MANY PEOPLE HAVE WIRELESS
- SIZE
- COMPONENTS
- SOURCE

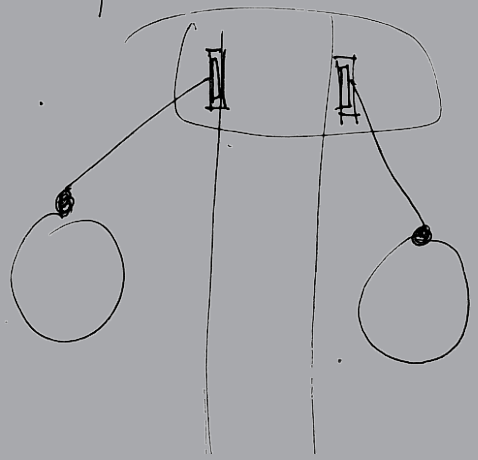


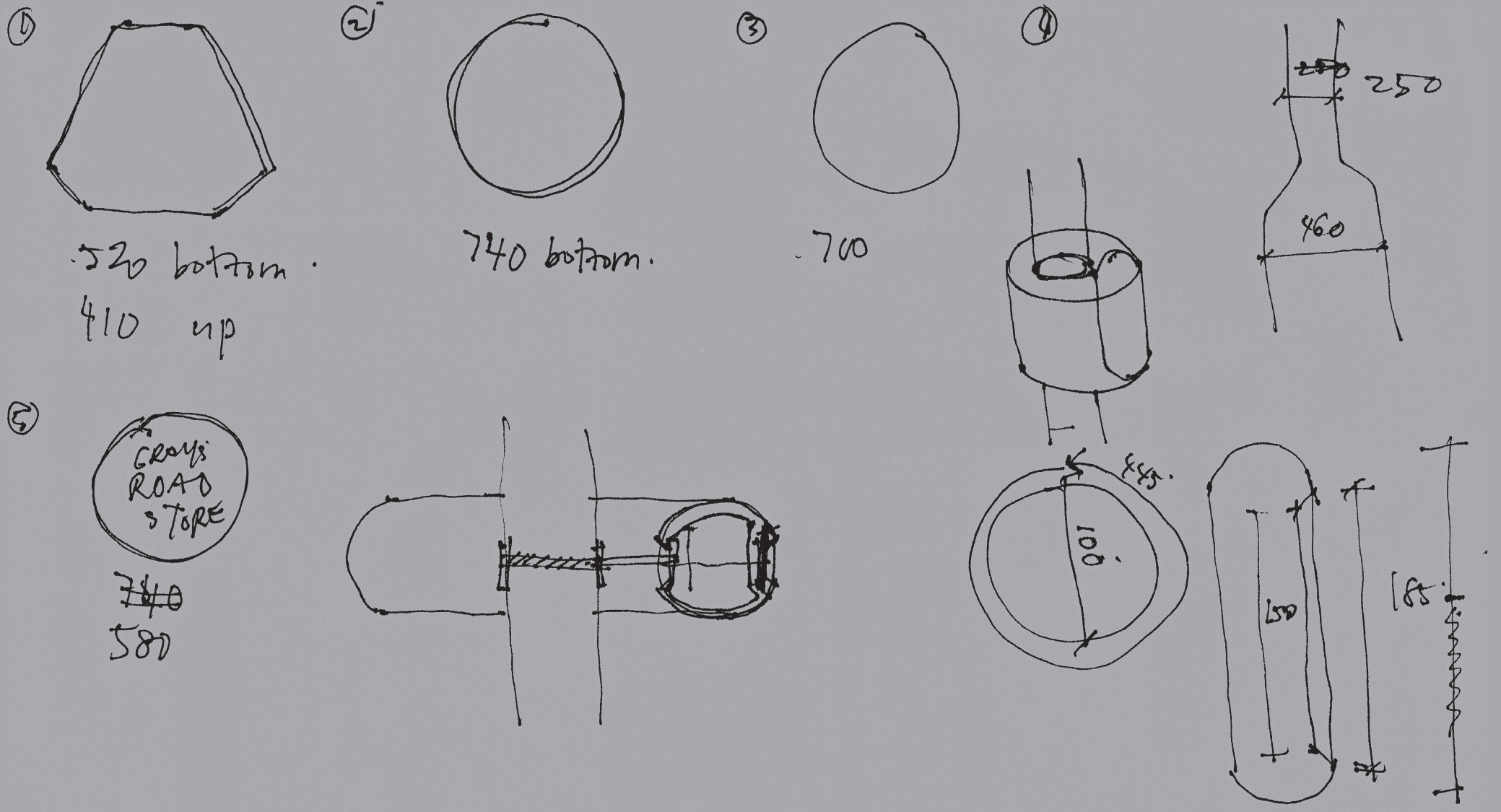


drawing doughnut shape for Urban and main road use

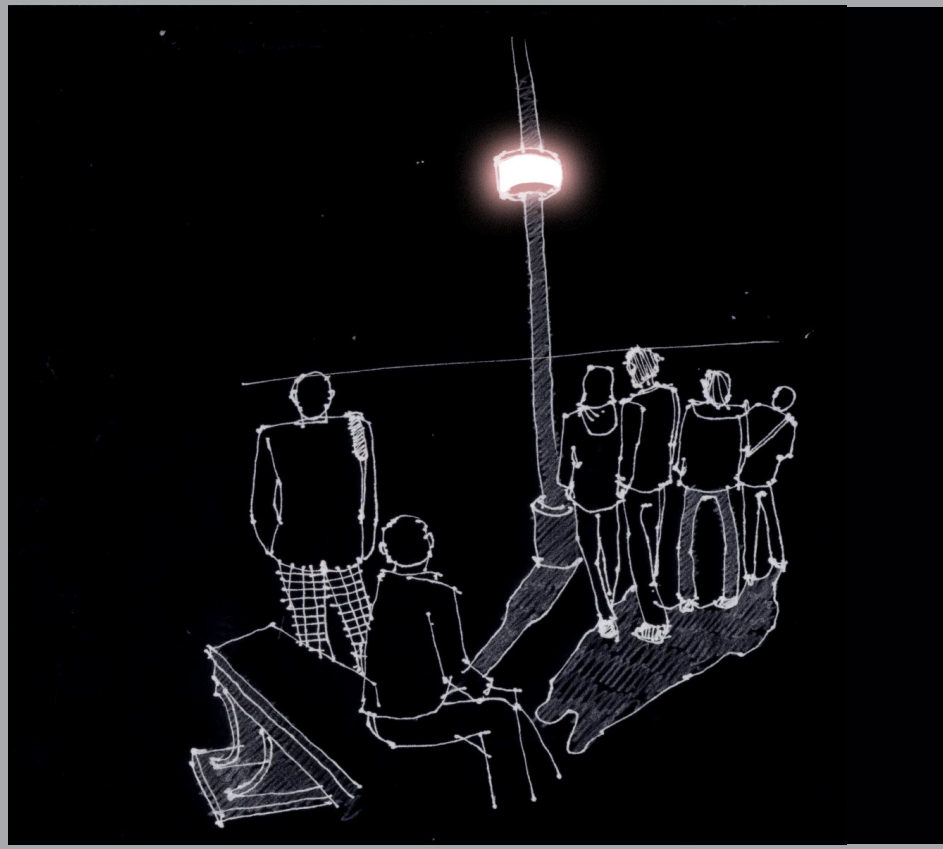







①
520 bottom.
410 up
②
740 bottom.
③
700
④
250
460
445
100
650
185
⑤
GRAYS ROAD STORE
~~740~~
580

the concept



the components

signal receiver

A wireless network uses radio waves, just like cell phones, televisions and radios do. In fact, communication across a wireless network is a lot like two-way radio communication.

plasma display

The main advantage of plasma display technology is that you can produce a very wide screen using extremely thin materials. And because each pixel is lit individually, the image is very bright and looks good from almost every angle. The image quality isn't quite up to the standards of the best cathode ray tube sets, but it certainly meets most people's expectations.

The biggest drawback of this technology has been the price. However, falling prices and advances in technology mean that the plasma display may soon edge out the old CRT sets.

electronic circuit

A chip is a tiny piece of silicon, usually around one centimeter square. A chip may be a single transistor (a piece of silicon that amplifies electrical signals or serves as an on/off switch in computer applications). It can also be an integrated circuit composed of many interconnected transistors. Chips are encapsulated in a hermetically sealed plastic or ceramic enclosure called a package. Sometimes people refer to the whole package as a chip, but the chip is actually inside the package.

existing power sources

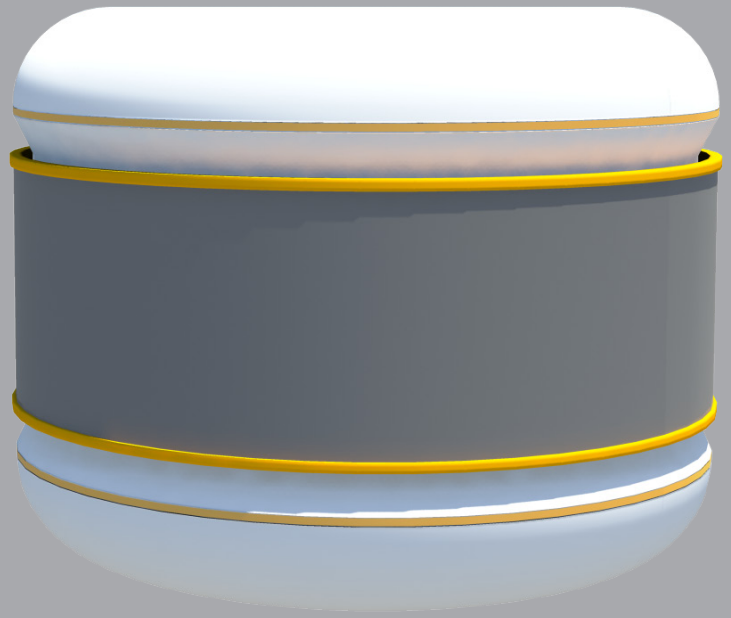
Power sources from the existing built fabric such as electricity pylon, lamp post and other local electricity supplies.

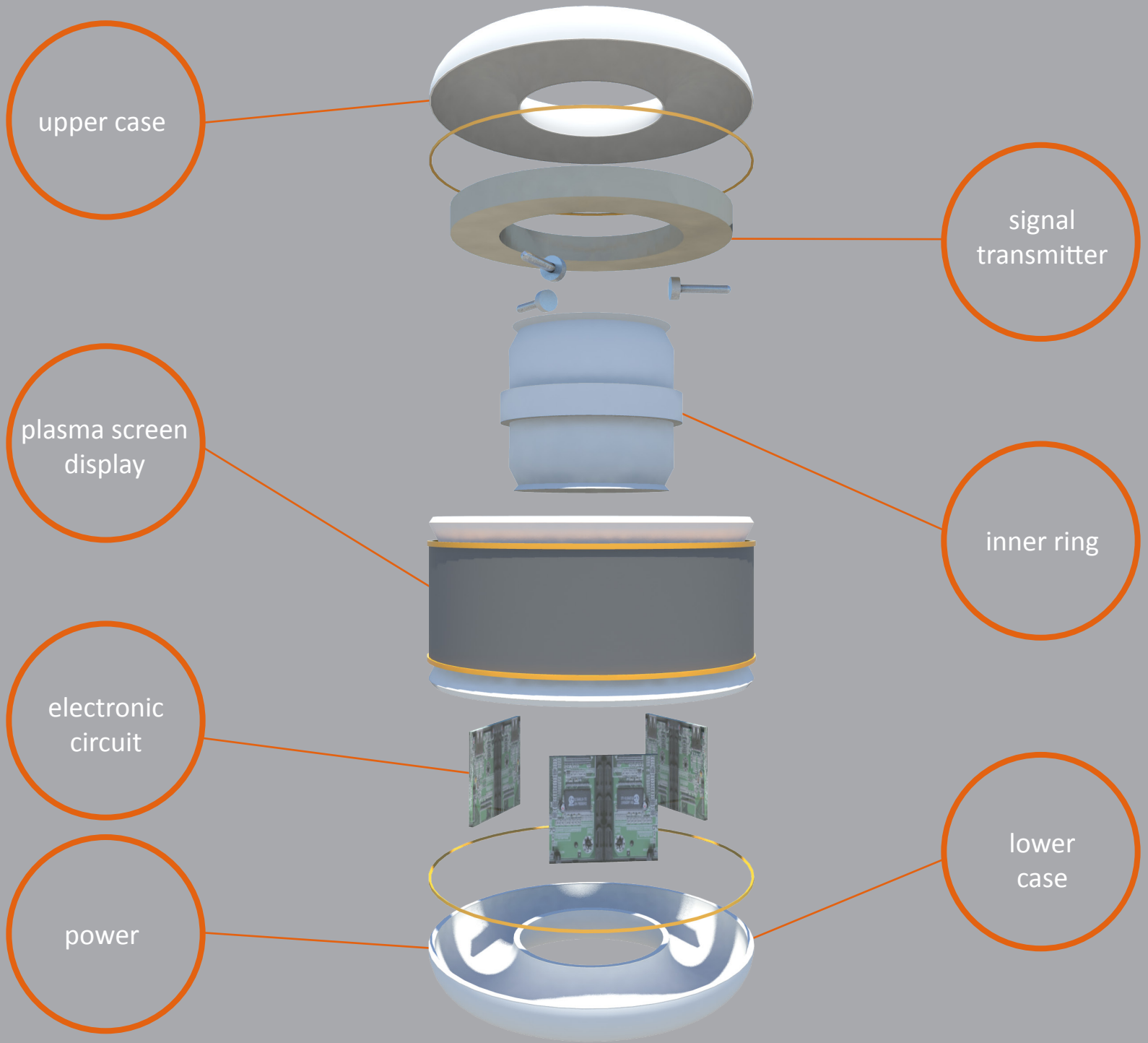
solar cells battery

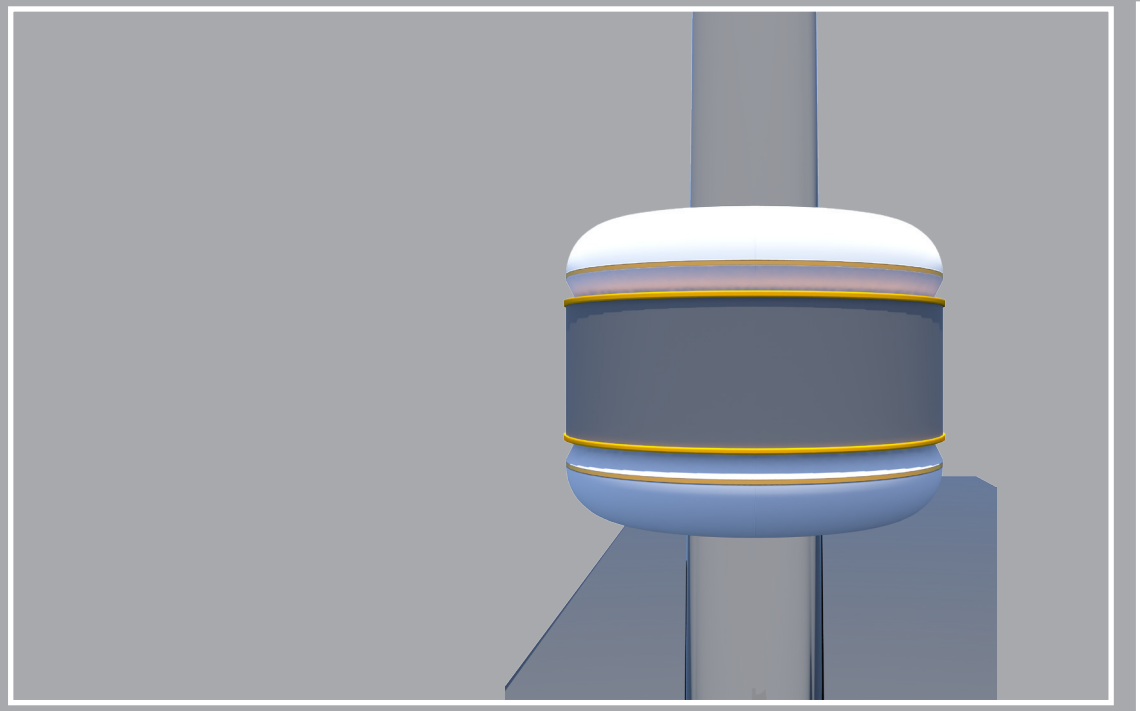
They don’t require external electrical sources to recharge your batteries. This means that solar battery offer freedom of movement. You can find the sun pretty much anywhere on Earth during the daytime.

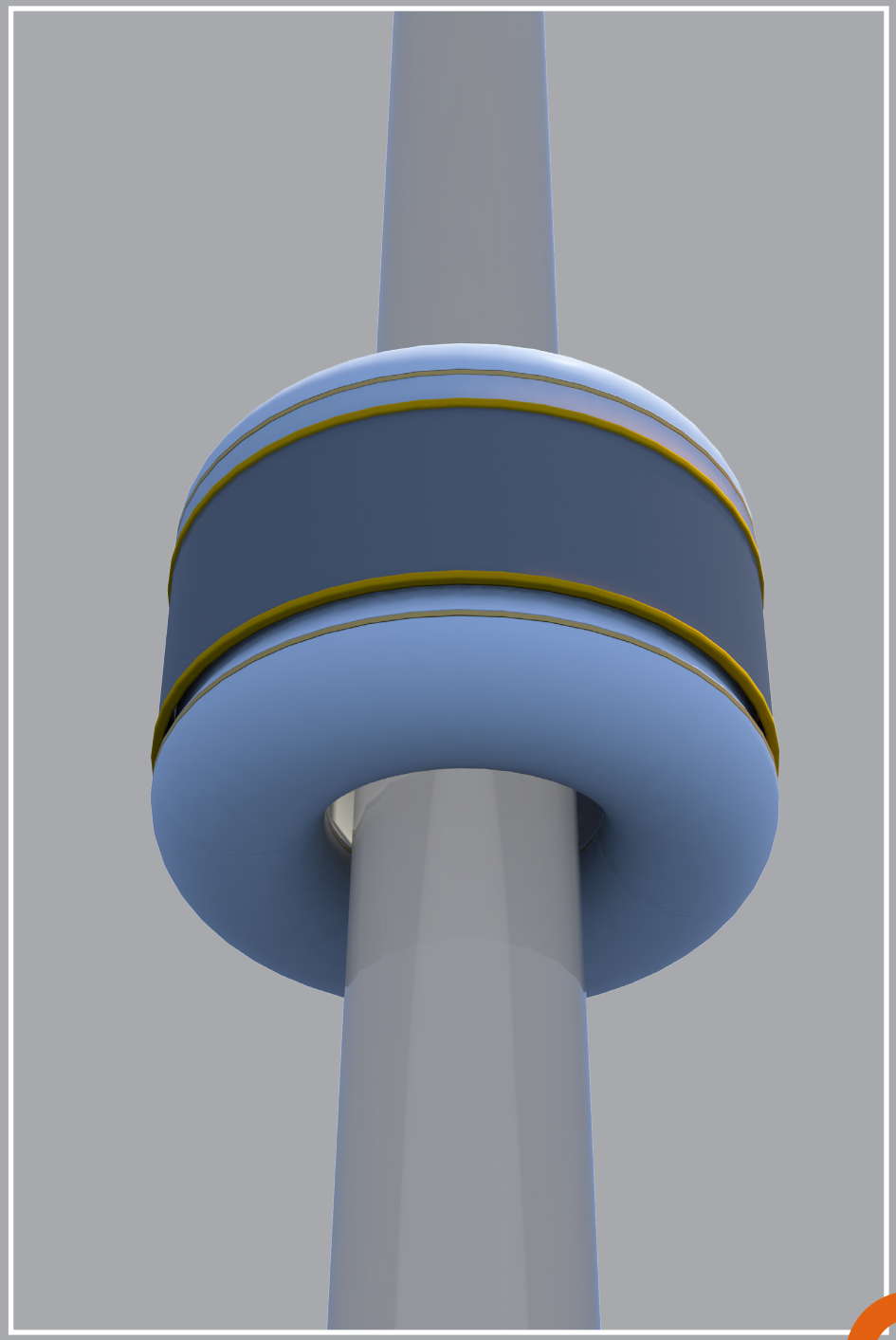
the prototype

halo




upper case
signal transmitter
plasma screen display
inner ring
electronic circuit
power
lower case



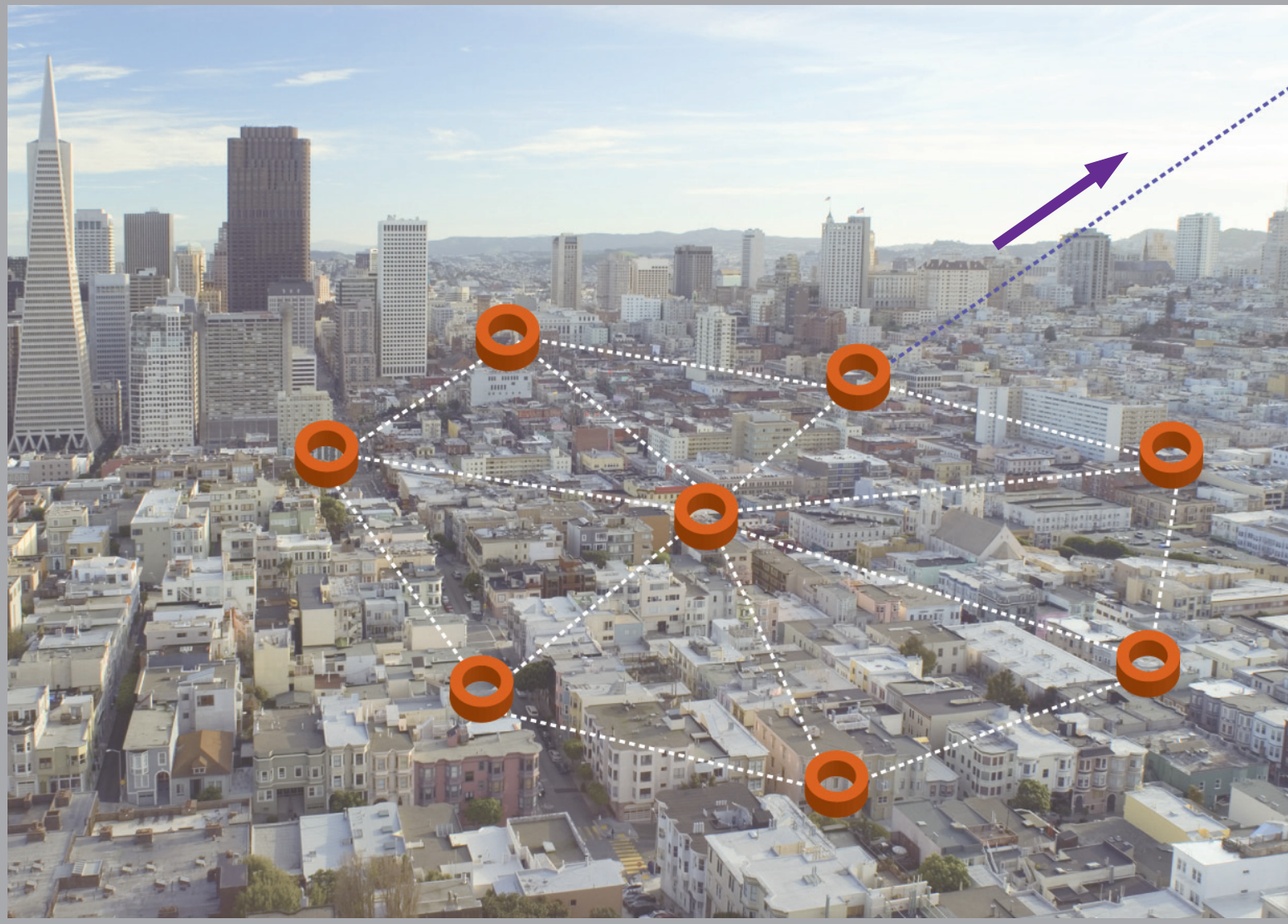


Most municipal wireless networks use a mesh rather than a hub and spoke. A mesh is a series of radio transmitters. Each transmitter is able to communicate with at least two others. They create a cloud of radio signals through the city. Signals travel from router to router through this cloud.

In some networks, signals hop from one receiver to another until they reach a node that has a wired connection to the Internet. Other networks use backhaul nodes. They gather up all the data from many transmitters and haul it back to the Internet by sending it to a router with a wired connection. Backhaul nodes are usually point-to-point or point-to-multipoint nodes. They can either connect one point to exactly one other, or they can connect one point to several points.

wireless coverage

backhaul to the internet



B5
Bus Stop
Brookes University
City Centre
7C
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108
261
275
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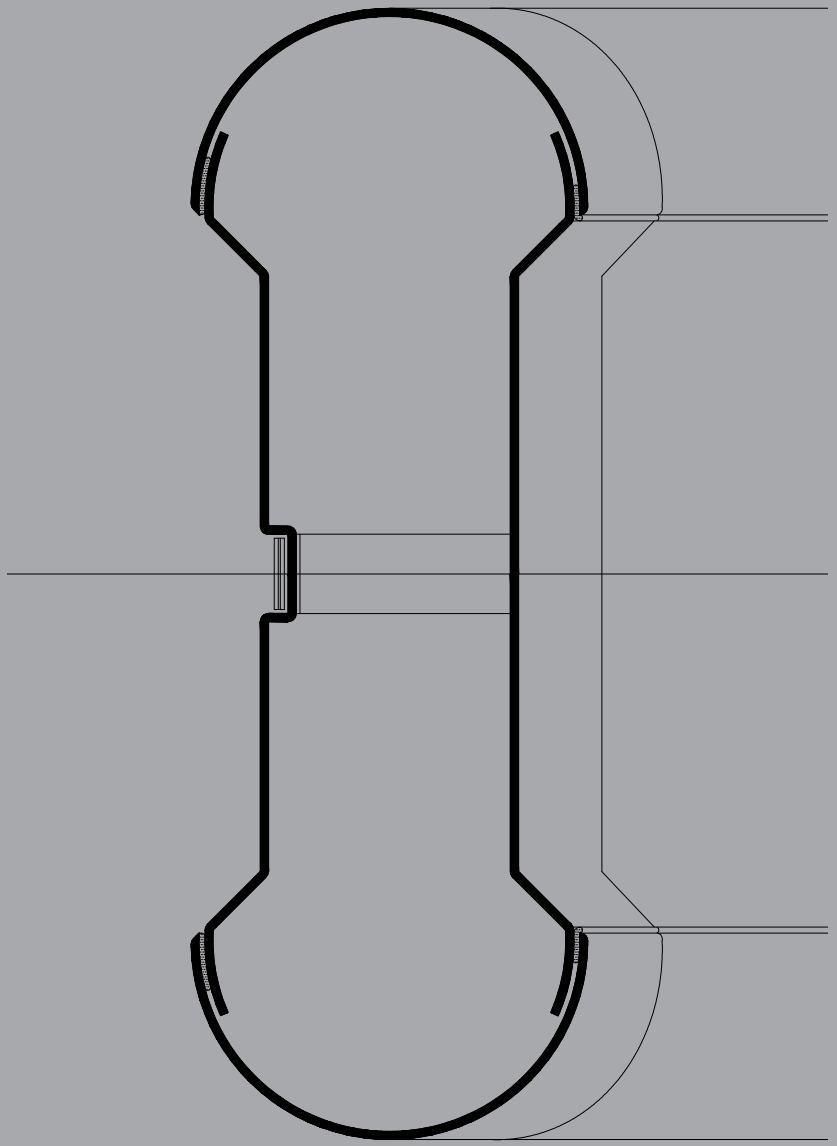
U1

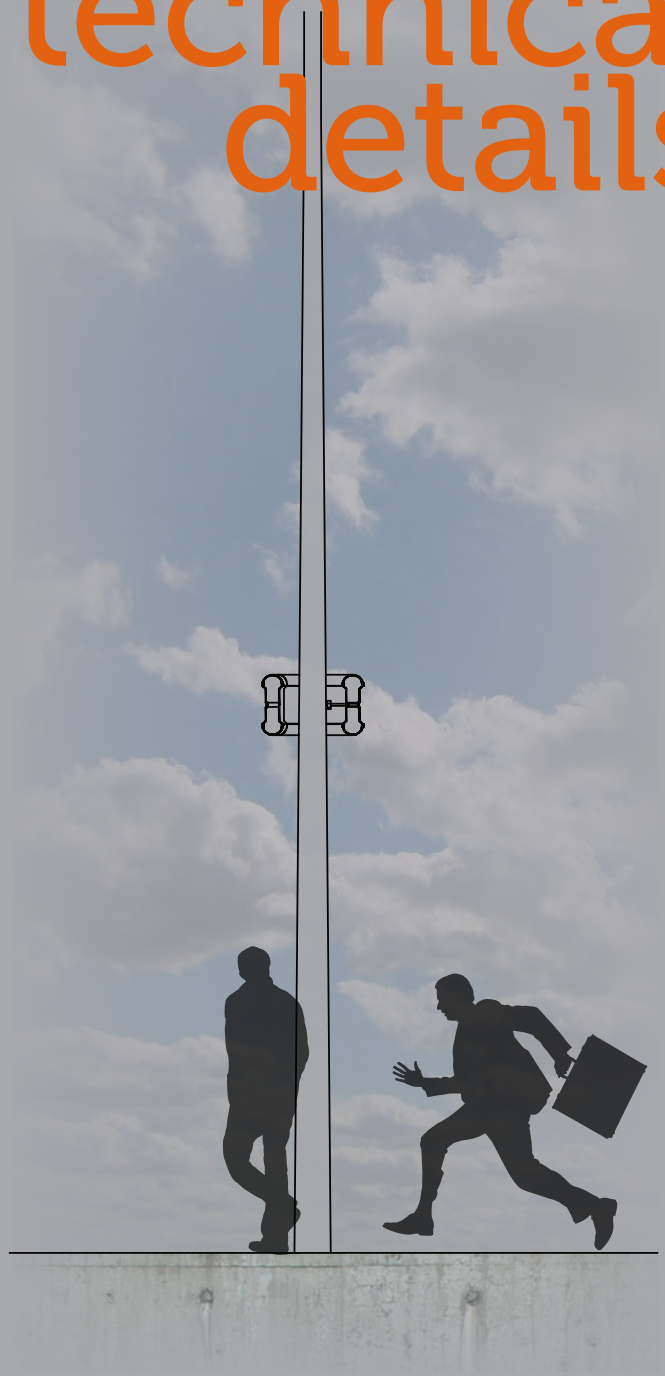
ctions proj

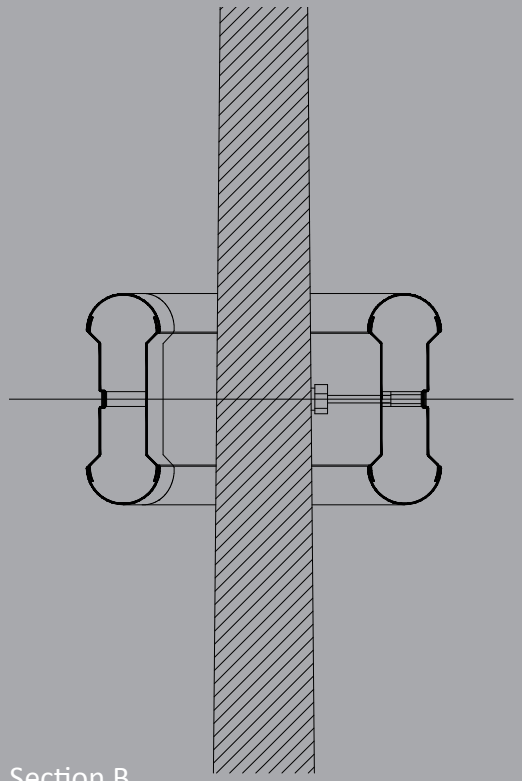
ions project

halo: futu

technical details







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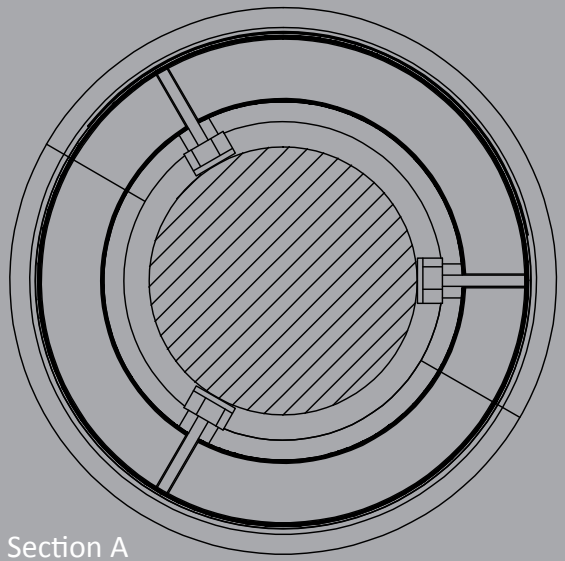
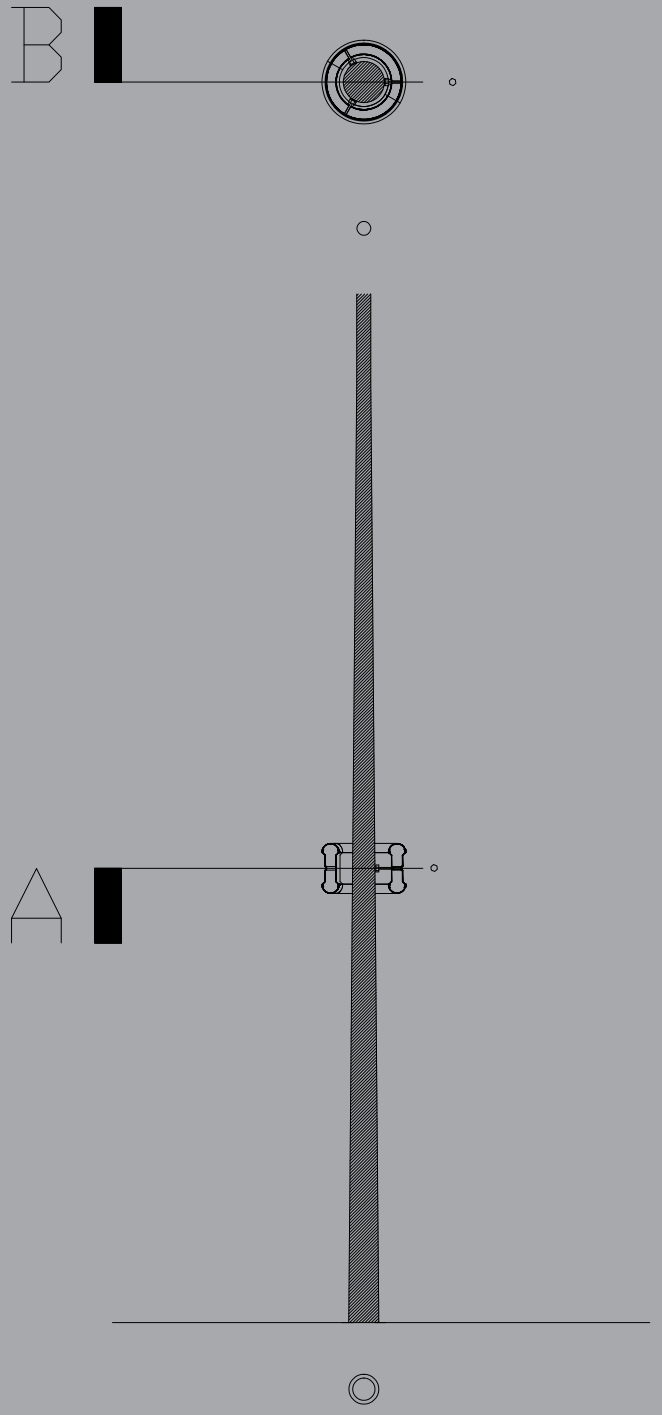


Section A



behind the scenes